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Developing and evaluating interventions for women firesetters in high secure mental healthcare

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Abstract

Purpose

To discuss the implementation and evaluation of interventions for women firesetters in high secure mental healthcare at the UK's National Women's Service (NWS).

Methodology/approach

Two types of Arson Treatment Programmes for women, one delivered to individuals, the other within a group context, were developed, delivered and evaluated. The evaluation incorporated qualitative and quantitative data, including psychometric measures. Qualitative data was analysed using Thematic Analysis.

Findings

The evaluation evidenced very high engagement with and attendance at treatment programmes, and several post treatment gains. Participants' ratings of programmes and qualitative feedback were similarly very positive. The study demonstrated that engaging women firesetters in their treatment is paramount and can be facilitated by consistent boundaries around therapy provision balanced with sensitivity, empathy and flexibility; providing interactive and varied teaching methods; on-going service user involvement and recognizing participants' achievements; employing a mixed Cognitive Analytic Therapy (CAT) and Cognitive Behavioural Therapy (CBT) therapeutic approach; having input from fire service staff; and maintaining organisational support for firesetting interventions.

Practical implications

Twelve key recommendations are made for clinicians considering offering treatment programmes for women firesetters.

Originality/value

Amid few published papers on treating women firesetters this paper guides forensic clinicians in establishing and delivering interventions for women firesetters.

K**eywords** Arson treatment, firesetting, high secure, treatment delivery, mental health, United Kingdom

Paper type Research paper

Introduction

This paper discusses the implementation and evaluation of group and individual arson treatment programmes over eight years at the UK's National Women's Service (NWS).

The term firesetting (versus arson) is mostly used throughout the paper as it embraces a wider range of people who deliberately set fires. 'Arson' defines the specific criminal act of intentionally or recklessly setting fire to property or wildland areas (Dickens and Sugarman, 2012**)**. A firesetter "displays a behavioural phenotype, the deliberate setting of fires, which may not have been prosecuted, for a number of reasons" (Dickens and Sugarman, 2012).

Overview of theories of firesetting

Early theories of firesetting included Social Learning Theory (Gannon, Ó Ciardha, Doley, and Alleyne, 2012); Jackson's functional analysis model: Firesetting as the Only Viable Option (Jackson, Glass, and Hope, 1987; Jackson, 1994); and Fineman's (1995) dynamic behavioural theory. Social learning theorists view firesetting as the product of learning principles and a form of learnt hostility/aggression. For example, firesetting can be instantly reinforcing through the sensory excitement, the sirens, crowd, and noise associated with the fire (Vreeland and Levin, 1980). Jackson et al., (1987) developed the first multifactorial theory of firesetting which postulates that the behaviour is likely to be repeated when the antecedents and consequences of arson are such that certain criteria are met. Key antecedents are psychosocial disadvantage, dissatisfaction with life and self, social ineffectiveness, specific psychosocial stimuli and a triggering stimulus. Clinicians have endorsed this theory but it lacks explanatory depth, such as its failure to explain why some individuals who experience psychosocial disadvantage do not engage in firesetting (Gannon and Pina, 2010). Fineman's (1995) model similarly views firesetting as a product of historical factors that predispose to antisocial behaviour in general; historical environmental factors that have legitimized firesetting; and immediate environment conditions that encourage firesetting. Whilst containing strengths this theory leans more towards juvenile firesetters than adult firesetters.

Addressing their concerns regarding earlier theories, Gannon, Ó Ciardha, Doley and Alleyne (2012) developed the Multi-Trajectory Theory of Adult Firesetting (M-TTAF). This theory positively organizes research into hypothesized dynamic risk factors or vulnerabilities associated with the facilitation and maintenance of firesetting behaviour; combines distal (background characteristics) and proximal factors (represent an immediate vulnerability) as contributors to firesetting; identifies key factors associated with repeated firesetting and firesetting desistence; and describes key firesetting trajectories (patterns of characteristics leading to firesetting). Five key trajectories are Antisocial Cognition, Grievance, Fire Interest, Emotionally Expressive/Need for Recognition and Multi-faceted. However, this theory lacks detail about how the process of setting fires unfolds for mentally disordered offenders (Tyler et al., 2014). Consequently, Tyler et al. (2014) developed the Firesetting Offence Chain Model for Mentally Disordered Offenders (FOC-MD). This

model emphasizes childhood experiences of fire and mental illness as precursors to firesetting.

Firesetting in women

Coid, Kahtan, Gault, and Jarman (2000) observed that women were more likely than men to have an index offence of arson and histories of firesetting. Indeed, firesetting often precipitates women's admissions to secure treatment services (Cunningham, Timms, Holloway, and Radford, 2011). Within the NWS in December 2015, 63% of patients had histories of firesetting and among these 47**%** had received a conviction for arson/firesetting. Comparable figures regarding male patients were unavailable.

Female firesetters are typically of low-average IQ (Noblett and Nelson, 2001), have low socioeconomic status and are poorly educated (Harmon, Rosner, and Wiederlight, 1985; Stewart, 1993; Tennent, McQuaid, Loughnane, and Hands, 1971; Wachi et al., 2007) and are likely to have experienced attachment difficulties and trauma (Harmon et al., 1985; Puri, Baxter, and Cordess, 1995; Hickle and Roe-Sepowitz, 2010). These findings are paralleled for women firesetters within the NWS and have important implications for treating women firesetters, such as needing to consider their lack of education and their attachment difficulties in providing treatment.

The research literature on motives for women's firesetting is scant and underdeveloped (Gannon, Tyler, Barnoux, and Pina, 2012). Studies with a male firesetter comparison group (Rix, 1994; Dickens et al., 2007) show that there do not appear to be large differences across female and male firesetters. Revenge appears to be a common motivator for both genders. Firesetting as a cry for help however, appears to be more prevalent among female firesetters (Dickens et al., 2007). Promoting relocation was also found to be an important motivator for women (Rix, 1994) supporting Jackson et al.'s (1987) work which proposes that firesetting can facilitate escaping or changing difficult circumstances.

In studies without a comparison group Harmon et al. (1985) similarly noted that anger and a cry for help were predominant motivators in women firesetters. Stewart (1993) in line with the M-TTAF (Gannon, Ó Ciardha, Doley and Alleyne, 2012) noted that some female prisoners had multiple motives for firesetting including revenge (33%), attention seeking (20%), instrumental (20%), mental illness (10%), suicide (8%) and pyromania traits (5%). Additional motives in Tennent et al.'s (1971) study of female firesetter in-patients were conflict with authority and self-harm/destruction. Cunningham et al. (2011) found that female in-patients reported firesetting alongside distressing life experiences.

Gannon's (2010) review of research regarding characteristics, psychopathologies, and treatment efforts with female arsonists noted that key features that differentiate female from male arsonists were the prevalence of sexual abuse, depression, psychosis, and attention seeking/cry for help motivations; and the absence of desire to witness firefighting activities or display firefighting skills; of firesetting in pursuance of crime concealment or profit; and of sexual fetishism associated with fire. These findings have important implications for treating women firesetters.

The treatment needs of women fire-setters

Gannon (2010) suggested that female firesetters would benefit from an eclectic programme of flexible treatment modules covering offence analysis, the relationship between childhood history and adult functioning styles (including coping skills, anger management and assertiveness, problem solving and general communication styles), specific interest in fire, and relapse prevention work. She also advocated work on the effects of victimization on their interpersonal functioning, self-esteem and coping; and work to develop supportive relationships. Long, Fitzgerald and Hollin (2015) recommended that interventions include a focus on fire interest and offence-related cognitions and be fully informed by a sophisticated functional analysis.

Development of fire-setting interventions for women

Gannon, Tyler, Barnoux and Pina (2012) noted that the only published descriptions of treatment for female firesetters concerned either tailored treatment for unusual cases or treatment for women in psychiatric facilities using CBT (e.g. Swaffer, Haggett, and Oxley, 2001; Taylor, Thorne, Robertson, and Avery, 2002; Taylor et al., 2006).

In November 2006, alongside Into the Mainstream (DH, 2002), a national service for women in high secure mental healthcare was established and women were treated separately from men. In 2007, the authors started developing arson treatment programmes specifically for these women and since then they have developed two types of programmes specifically for women, one delivered within a group setting (Arson Treatment Group Programme (ATGP)) and the other for individuals (Arson Treatment Individual Programme (ATIP)).

Within the NWS, these programmes have been developed based on the available research evidence and theories described above. A combined CAT and CBT approach has replaced an initial pure CBT approach (Beck, 2013) as described later. CAT brings together understandings from cognitive psychotherapies and from psychoanalytic approaches and focuses on understanding and changing patterns of problematic behaviours (Ryle and Kerr, 2002). In CAT there is a focus on the therapeutic relationship in order to provide a non-collusive relationship in terms of not replicating problematic patterns of relating to self and others. CBT is based on cognitive and behavioural principles. People's emotional reactions and behaviours are seen to be strongly influenced by their thoughts, beliefs and interpretations about themselves or the situations in which they find themselves (Westbrook, Kennerley and Kirk, 2011).

More recently, Gannon, Lockerbie, and Tyler (2013) implemented a 28 week Firesetting Intervention Programme for Mentally Disordered Offenders (FIP-MO) mostly within medium secure units and one high-secure hospital (HSH) providing services just for men. Gannon et al. (2015) delivered the same programme to both women and men. Their pilot run suggested that CBT had a significant impact on

reducing problematic psychological factors associated with deliberate firesetting in males. However, their study pertaining to females is incomplete and does not include women within high secure mental healthcare. Such women pose grave risks to others, and often also to themselves. Treatment is therefore delivered within the highest levels of physical, procedural and relational security and these very high risks require constant consideration and management.

This paper describes the implementation and evaluation of two group treatment programmes and two individual treatment programmes and aims to increase our understanding of firesetting treatment programmes specifically for women in secure hospital settings. Key differences between these programmes and the FIP-MO were the development of programmes specifically for women (versus a programme for use with both male and females in FIP-MO), the provision of programmes for individuals and groups (versus just groups in FIP-MO); the length of group therapy programmes (17-18 months versus 28 weeks for FIP-MO) and individual modules (Shorter in FIP-MO), the number of group treatment sessions delivered (61/66 versus 28 for FIP-MO); the number of staff delivering group programmes (3-5 versus 2 for FIP-MO), the strong psycho-therapeutic aspect to treatment with an emphasis on learning through therapeutic relationships (not a feature of FIP-MO), the incorporation of modules on trauma (from 2009) and self- esteem (FIP-MO does not have a trauma module and self-esteem is part of the social competence module), and the incorporation of additional work.

Research questions

The research questions were:

What are patients and other stakeholders' opinions of arson treatment programmes delivered?

How can treatment programmes be responsive to patients' needs?

What are the benefits and drawbacks of group versus individual treatments?

Ethics

The Research Management and Governance Department of the NHS Trust where the evaluation occurred gave ethical approval for the evaluation.

Method

Participants

Participants were twenty two women (mean age 33 years, range=21-47) detained under the Mental Health Act within a HSH because of their dangerousness to others. Most women (95%) were white British. All had histories of firesetting and 19 (86**%**)

had arson/firesetting convictions. One participant failed to complete the first programme she started but completed a second. Participants were referred to Arson Treatment Programmes by their responsible clinician and assessed by two Arson Treatment Team members using a structured questionnaire developed by the team, which included assessment of participants' motivation to engage in arson treatment. Some motivation to engage in arson treatment was required.

Most participants (73%) had undertaken some prior preparatory work to develop their emotional regulation and coping skills (e.g. Dialectical Behaviour Therapy) and some completed such work (28%) whilst attending Arson Treatment Programmes.

A control group was not included due to ethical issues of withholding treatment. Also, the population of women within the NWS is a specific population due to their presenting risks and selecting controls from a wider population would be challenging.

The Treatment Team

The Arson Treatment Team was led by a Consultant Clinical Psychologist and comprised of nursing, psychology, and social care staff. Most staff were registered practitioners with extensive experience in forensic settings. To develop the team's knowledge and skills regarding women's firesetting the team networked and attended study days and conferences, training events including training by the fire service, and fortnightly team reading seminars.

Three to five staff members delivered each group session depending on patient numbers. Also, an additional ward staff member was outside the therapy room for emergency situations.

Development and components of Programmes

Two Arson Treatment Group Programmes (ATGP1 and ATGP2) and two Arson Treatment Individual Programmes (ATIP1 and ATIP2) were developed, delivered and evaluated between 2007 and 2015. Table 1 illustrates programme components.

Table 1: Components of Arson Treatment Programmes

Programmes targeted treatment needs identified in the literature and in participants' file reviews. Structured session plans guided the delivery of sessions and participants completed work between sessions. Programmes were developed alongside ongoing evaluation.

All modules incorporated introductions, and evaluation within the last session. Additionally, Module 1 introduced participants to the overall programme and the final module incorporated a whole programme evaluation.

The Dangerousness of Firesetting Module addressed the dangerousness and possible consequences of firesetting, lifetime experiences of fire, and each person's responsibility for their firesetting behaviours. In group programmes, fire service staff contributed to an interactive session with participants on the dangerousness and potential consequences of firesetting behaviours.

The coping and social skills module focussed on developing skills in communication and assertiveness; problem solving and accessing support; managing stress, anxiety and anger; and conflict resolution and negotiation.

In the module on trauma (not delivered in ATGP1) the meaning of, types of, and impacts of trauma; potential links between trauma and firesetting; and coping with trauma were explored.

The Self-Esteem and Self-Awareness module focussed on the meaning of, understanding changes in, and improving self-esteem and self-awareness. Mask work to consider how participants saw themselves and were seen by others, was utilised to support women in becoming better observers of themselves, and their interactions with others.

In the Relapse Prevention module participants considered possible commonalities and patterns in their past firesetting, risk escalating and risk reducing factors, and their current and future risks of firesetting. Arson signatures and crisis cards were used to facilitate participants' recognition and management of their risks. In arson signatures a traffic light system alerts participants to increasing risk and participants consider how they can manage their risks and access support. Crisis cards contain significant others' contact details for crisis situations. In group programmes this module included a return visit by fire service personnel.

Arson Treatment Group Programmes

Arson Treatment Group Programmes lasted eighteen months and consisted of a weekly two and a half hour therapy group with a midway coffee break plus

weekly/fortnightly individual sessions with a group facilitator to conduct functional analyses of previous firesetting episodes, reinforce learning, develop a firesetting formulation, and provide support.

Treatment groups were closed and 16-18 months to foster trust and safety within a patient population that struggles to trust others (Compton Dickinson, 2006), and to support the development of the therapeutic process and participants' skill acquisition. Expectations around group participation were agreed to promote safety and encourage individuals to own their contribution to sessions.

Arson Treatment Individual Programmes

Arson Treatment Individual Programmes were designed for patients who could not access groups due to their exceptionally high risks to themselves and/or others. Thirty two sessions were delivered over five modules. These programmes included simple session plans and focussed on key topics. Programmes were designed to increase preparedness to join a group programme later on pending participants' risks reducing.

Programme developments over time

Major developments over time included the introduction of a module on trauma in 2009; more experiential and diverse teaching methods; and greater patient involvement, including in 2011, group programme graduates speaking to new participants, and the introduction in 2012, of an end of programme presentation by patients and facilitators to participants' clinical teams. The 2012 presentation was filmed and educates professionals and new participants about programmes.

Early on too, a combined CBT and CAT therapeutic orientation replaced a pure CBT approach related to CAT's foci on creating and maintaining a safe and predictable therapy space which facilitates participants' therapeutic engagement; and sharing observations about occurrences within therapy which provides a vehicle for considering events. Also, CAT's focus on how problematic patterns from people's pasts can emerge within current relationships enables the consideration of links between past and present within therapy and supervision. Further, CAT tools such as CAT diagrams and goodbye letters assist facilitators and patients in considering, and where appropriate, changing patterns of thinking, feeling and behaving. Finally, CAT facilitates consideration of issues specific to the stages of therapy. For example, the ending may evoke feelings linked to patients' previous losses.

Data collection

Information on patient attendances at group and individual sessions and patients who did not complete programmes was recorded.

Participants completed rating scales and psychometric tests pre and post treatment. Eleven pre and post measures were used to assess ATGP1 participants. These

examined fire interest; reasons for firesetting and consequences; blame attribution; perspective taking, empathic concern, fantasy and personal distress; problem solving; aggression; anxiety; depression; impulsivity; social desirability; emotional loneliness; and self-esteem. In some cases ranges rather than scores were saved which means not all measures can be reported on. Those reported on are the Blame Attribution Inventory (Gudjonsson, 1984); Fire Interest Rating Scale (Murphy and Clare, 1996); Functional Assessment of Fire Starting (Unpublished); Interpersonal Reactivity Index (Davis, 1980, 1983); Personal Reaction Inventory (Unpublished); and the Emotional Loneliness Scale (Russell, Peplau, and Cutrona, 1980).

Measures used changed after ATGP1 related to patients' struggles to understand some tests, difficulties administering numerous measures and researcher advice to use fewer measures. From 2009 five core psychometric tests were utilised. The Inventory of Altered Self Capacities (Briere, 2000) assesses difficulties in relating, identity and affect regulation. The Social Problem-Solving Inventory Revised (D'Zurilla, Nezu, and Maydeu-Olivares, 2002) assesses problem-solving abilities. The Multidimensional Self Esteem inventory (O'Brien and Epstein, 1988) was initially used but replaced with the more user friendly Rosenberg Self-Esteem Scale (Rosenberg, 1965). The Coping Responses Inventory (Moos, 1993) assesses coping strategies, and the Paulhus Deception Scales (Paulhus, 1998) identify individuals who distort their responses.

Questionnaire feedback from patients was obtained at the end of each module and at the end of the programme overall. Within the End of Programme Feedback Form participants rated the extent they agreed with 17 statements using a five-point Likert scale (1 – strongly disagree and 5 – strongly agree). Examples included "The content of group sessions was interesting" and "The group facilitators were sensitive to participants' feelings".

Finally, to assess the benefits and drawbacks of group versus individual treatments information on this theme was collated from team supervision records.

Data analysis

Psychometric tests scores were entered into SPSS for programme completers. Due to the small sample sizes, data was aggregated for participants in individual programmes. Data was not aggregated for participants in group programmes because of changes in psychometric measures after ATGP1.

Data for group and individual programmes is presented separately because of the different nature of these programmes. Descriptive analysis of psychometric data was conducted, with inferential statistics impossible because of small sample sizes.

Participants' comments on modular and end of programme feedback forms was transcribed verbatim and collated. Team members coded and categorised this qualitative data using a thematic approach (Braun and Clarke, 2006). In terms of resultant themes the authors fully acknowledge the active role they as researchers

played in identifying patterns/themes, selecting which were of interest and reporting these to readers.

Results

The attendance and completion rates for the arson treatment programmes for groups and individuals are presented in Tables 2 and 3 respectively. Table 2 shows that only one out of fourteen patients (7%) decided to leave a group programme and attendance rates were very high for programme completers.

Table 2: Arson Treatment Group Programmes: Number of completers, reasons for non-completion and attendance rates

Table 3: Arson Treatment Individual Programmes: Number of completers, reasons for non-completion and attendance rates

Table 3 shows that across both individual programmes one third of participants did not complete programmes because of mental health deterioration. Attendance rates for completers were extremely high.

Arson Treatment Group Programmes psychometric test results

In some cases ranges rather than scores were saved which means that not all measures can be reported on for participants in ATGP1 in Table 4.

Table 4: Psychometric scores for ATGP1 participants

Post ATGP1 participants reported much less interest in fire, less use of fantasy, less personal distress and less loneliness. Socially desirable responding and blame attribution remained very similar pre and post treatment. Participants reported the

important roles of social attention, depression and anger as motivators for fire setting and post treatment recognised anxiety as an additional important factor.

Table 5: Psychometric scores for ATGP2 participants

Table 5 shows that ATGP2 participants showed improvements post treatment in all areas of self-capacities, all areas of problem solving, all areas of emotional problems and on self-liking and global self-esteem. Scores for impression management and self- deceptive enhancement varied slightly but remained with the average range.

Arson Treatment Individual Programmes psychometric test results

Table 6: Psychometric scores for ATIP1 and ATIP2 participants

Participants in ATIP1 and ATIP2 showed improvements in 10/11 self-capacities scales and all areas of emotional problems. Overall, there was little change in problem solving abilities. Caution is advised regarding the findings from the Fire Interest Rating Scale as one participant's fire interest increased and another's

decreased. In terms of self-esteem ATIP1 participants reported a small improvement in global self-esteem with biggest improvements in terms of competence and lovability. ATIP2 participants demonstrated a big improvement in self-esteem, with improvements in both self-competence and self-liking. Scores for impression management changed slightly from the average to slightly above average range whilst scores for self-deceptive enhancement remained in the average range. Depression, anger and anxiety were the greatest motivators for firesetting. The greatest perceived consequence of firesetting pre and post treatment was anxiety.

Arson Treatment Programmes Questionnaire Feedback

Participants' questionnaire feedback was analysed to describe their mean scores on the Feedback Form Likert scale items.

Participants' mean rating for ATGP1 across seventeen questions within a rating scale (1 - strongly disagree and 5 – strongly agree) was 4.08/5. Their mean rating for ATGP2 was 4.40/5. High ratings indicate favourable feedback.

Participants' mean rating for ATIP1 across seventeen questions was 4.88/5. Their mean rating for ATIP2 was 4.37/5.

The remaining items on the Questionnaire Feedback forms were analysed thematically. The emerging themes are presented separately for Group and Individual Programmes.

Arson Treatment Group Programmes feedback themes

Five main themes emerged which crossed both groups.

Good group, great benefits

All parties within ATGP1 valued the respect commitment, and reliability shown by all. Similarly, participants within ATGP2 liked working as a team and described the group as "a good calm group" where "patients and facilitators have respect for each other". The words "trusting", "trust", "considerate" and "care" were also used to describe what people liked about the group. ATGP1 participants described receiving "great benefits" including how the group programme helped with self-understanding:

"I've learnt to understand myself better even though it was very scary."

Similarly ATGP2 participants emphasised how the programme had helped them to build their skills, confidence and their awareness of themselves and others:

"The Arson Treatment Programme has helped me with confidence and my skills in talking and communicating with others."

"I've learnt coping skills and strategies to help me like keeping busy, getting support, talking about my problems and saying when I don't understand things."

"I've built up my self- esteem, I'm stronger."

ATGP2 participants also valued learning about the dangers and consequences of firesetting and developing insight into their reasons for firesetting:

"Knowing the consequences for myself and others are some of the most helpful things."

Interestingly, ATGP1 participants commented that positive things sometimes came out of things they did not like:

"Although I severely didn't like this part of the group [Self -Esteem and Self-Awareness Module] *it was probably the most beneficial part of the group for me."*

Finally, ATGP2 participants commented that the programme had "helped immensely", they had "enjoyed it" despite their anxieties and it had brought "a lot of hope for the future."

Changing attitudes to the group over time

ATGP1 participants reflected on their changing attitudes to the group over time as illustrated here:

"I never even thought I was an arsonist, I thought the group was going to be a waste of time. If you're honest with yourself and others it can be tough and very painful but in my experience this has been my turning point and it's been well worth it in the end.

Similarly, ATGP2 participants commented on their "poor participation" initially and this changing over time with developing trust in others and confidence in speaking up.

Important role of the fire service

Input provided by fire service personnel had a big impact. An ATGP1 participant appreciated the fire service "taking time to talk to us". An ATGP2 participant commented:

"I found his visit very interesting and helpful" and "I will always store in memory his advice, support and care".

Dislikes

Some ATGP1 participants disliked the day and times of the programme because of clashes with other things. Subsequent programmes ran on a different day. ATGP1 facilitators did not like the return of homework not being tracked and felt the coping and social skills module was too long. Consequently, a homework monitoring system was established and the coping and social skills module was shortened.

Some participants in ATGP2 did not like the group check-ins and check-outs and giving feedback at the end of group sessions. This may have related to feeling exposed.

Suggested changes

All parties within ATGP1 suggested more experiential exercises and more hand-outs to support teaching. Additionally, facilitators suggested the inclusion of a trauma module and participants suggested that future participants would benefit from hearing from participants who had completed the programme.

"If there is any future groups, I think it would or could be useful for them to hear the opinion of what we thought when we first started and what we think now we've finished."

Consequently, all of these suggestions were actioned.

Some ATGP2 participants suggested greater consistency with facilitators being present. This may have related to two ATGP2 facilitators experiencing unexpected events and missing much of the final module.

New additions to group were well received

ATGP2 participants liked the diverse teaching methods and specifically named role plays, newspaper stories and real life articles, poems, raps, games and art. The newly introduced trauma module was also well received with comments such as "I enjoyed this module, I learnt a lot about myself and my peers; "very helpful and interesting"; and "upsetting at times but apart from that I found this module ok". The end of treatment presentation by participants and facilitators to participants' clinical teams was very successful as illustrated:

"The presentation was a success, I really enjoyed the experience."

Arson Treatment Individual Programmes questionnaire feedback

Two main themes crossed both groups:

The Programme had meaning, value and learnt a lot

Participants in ATIP1 noted the overall importance of the programme.

"It meant a lot to me, taught important things."

"I have learnt a lot …"

One participant said she had learnt to think before taking action:

"They taught me is to think before actions."

Participants in ATIP2 valued the "help and support" and "1-1 attention" related to their struggles to "mix with others" and mental health issues. They also valued activities such as drawing, card sorting, and CAT goodbye letters.

Different perspectives on work between sessions

Participants noted different perspectives on work between sessions. For example this ATIP1 participant commented:

"Some are interesting, some are hard, but I managed them."

ATIP2 participants noted that the work between sessions helped keep them focussed on the work as illustrated here:

"Liked doing it, kept me thinking about the work I was doing in my session."

Additionally two further themes emerged from ATIP2:

Sometimes hard and intense but pride in completion

ATIP2 participants said the programme at times was "hard", "quite intense" and "a challenge", but noted many achievements and pride in completion as shown here:

"I've learned to trust someone I didn't want to, I've learned to push myself to do therapy even when I'm unwell, I've learned there are other ways and help than setting fires, I've learned what help me to do therapy to be able to focus in the here and now"

"I'm really really proud of myself. I never thought I would complete it or get this far"

More visuals, less repetition with Arson Signature

In terms of changes one ATIP2 participant suggested using more visual materials and making the arson signature less repetitive.

Benefits and drawbacks of group versus individual treatments

The perceived benefits and drawbacks of group versus individual treatment were extracted from team supervision records and are outlined in Figure 1.

Figure 1: Facilitators' assessments of key advantages and disadvantages of group versus individual arson treatment

Intervention	Advantages	Disadvantages
Arson Treatment Group Programme	Participants learn from and gain motivation and support from other participants. Facilitators gain experience from observing other facilitators. Longer programme facilitates consolidation of learning and greater topic coverage Participants can 'hide' within this setting.	Pace may not suit everyone.
Arson Treatment Individual Programme	Can adapt programme to meet individuals' specific needs. Easier to track participants' focus.	No sharing with or motivation or support from peers.

Discussion

The study in context

This study is the first study of a mixed treatment approach combining CAT and CBT developed specifically for treating women firesetters. This approach has been highly successful, enabling a focus on understanding and working positively with therapeutic processes, whilst also facilitating the integration of CAT tools and structured CBT activities. For example, CAT's focus on noticing and working with processes within therapeutic relationships assisted the authors in working with issues as they arose in therapy. For example, at the beginning of ATGP2 the

facilitators noticed that two participants were positioning their chairs away from the other group members. Discussion around this led to these participants acknowledging their fears of being in the group and other group members offering them support. On another occasion within a group session facilitators noticed how participants were struggling to voice their opinions. Following discussion, a "Feedback Box" was implemented at the end of every group session, to support participants in practising and developing skills in, addressing issues and giving constructive feedback. CAT Goodbye letters were also incorporated at the end of treatment programmes to enable reflection on participants' journeys through treatment including gains and any disappointments; to acknowledge feelings related to the ending; and to end well. This is important as therapy endings with HSH patients require careful management (Compton Dickinson, 2006).

This study has also, as a first, involved the development of two types of treatment, one delivered within a group context, and one for women being treated individually. Whilst all patients within high security pose grave risks towards others, and sometimes also to themselves, patients who received treatment individually posed exceptionally high risks and treatment delivery was impacted by this. For example, some of this work was conducted through a hatch (for segregated patients) and when patients were seen in therapy rooms there were often additional security measures such as an observing nurse within the room plus physical adjustments such as a special seat to prevent the patient exiting the seat quickly. Facilitating patients in staying in treatment, whilst simultaneously manging these risks, is considered by the authors to have been a huge achievement, in and of itself.

The incorporation of a module on trauma also differentiates this study from previous evaluations. This assists women in considering possible links between traumas experienced and firesetting behaviours and gives them ideas on coping in the aftermath of trauma. By recognizing these links, new areas of treatment need can be identified and considered, and participants' relapse prevention plans can be updated. Within the module on trauma much sensitivity has been required to assist participants to authentically and fully participate whilst also supporting them to keep focussed on the module aims. Participants have required support to maintain appropriate boundaries around discussion of traumas experienced in order to prevent themselves, and in group interventions, other group participants, becoming overwhelmed and very distressed. The incorporation of CAT with its emphasis on working positively with therapeutic processes has facilitated programme facilitators in grappling with and managing such issues within treatment.

Patients and other stakeholders' opinions of arson treatment programmes

The overall evaluation has evidenced very positive feedback and high levels of satisfaction with arson treatment group and individual programmes delivered. Attendance rates for programme completers were extremely high across all programmes. This is a very significant achievement as women in high secure mental healthcare are some of the most complex and challenging patients to engage within the UK. Further, results from pre and post psychometric tests demonstrated improvements in self-capacities, overall problem solving, emotional problems and self-esteem. These gains are important as these areas have been identified as

significant areas for women firesetters to address (Gannon, 2010). Notably, the extent of change was mainly greater for group participants than individual participants. This is perhaps unsurprising given that group programmes were longer than individual programmes, although this might also have reflected the severity of problems experienced by participants who received treatment individually.

In interpreting the findings it is important to note that they are based on self- report although results from the PDS do not suggest invalid scores or areas of concern. In future however, it is recommended that clinicians also complete some pre and post treatment ratings of participants, including risk ratings, to enhance the evaluation. Also, future programmes could usefully incorporate pre and post measures of anger, assertiveness, ability to access support, fire interest and offence related cognitions.

In terms of motivators for firesetting social attention, depression, anger and anxiety were the greatest motivators for firesetting echoing aspects of other studies (Harmon et al., 1985; Stewart, 1993; and Tennent et al., 1981), Jackson et al.'s (1987) work suggesting that a key antecedent for firesetting is dissatisfaction with life and self and Gannon et al.'s (2012) M-TTAF.

How to make treatment programmes responsive to patients' needs

Gannon (2010) noted the need to provide detail on "What Works" in treating female firesetters. Over time, the authors' clinical experiences and the evaluation data have demonstrated that making treatment programmes responsive to patient needs requires a whole system approach with attention to both treatment delivery itself and the system around this. Within the treatment setting implementing changes based on feedback and evaluation is key, as demonstrated within the evaluation data. Being responsive to patients' needs from the outset has also been vital, related to patients' wariness towards others. The authors' clinical experiences and the evaluation data demonstrate that initial engagement and the development of trust can be fostered by clear and consistent boundaries pertaining to therapy provision and behaviour within therapy. Examples include the importance of starting and finishing on time and having empty seats for absent group members. Programme graduates also provide positive role models for good engagement with the group process and the evaluation suggests developing programme graduates for individual programmes. Once engaged on-going participation can be supported by close attention to boundaries and therapeutic processes, pacing the therapy (e.g. introducing firesetting through talking about other firesetters), helping patients establish and maintain realistic treatment goals, interactive group exercises and varied teaching methods; celebrating patients' achievements and by remaining flexible and responsive to patients' needs.

Making treatment programmes responsive to patient needs has also included involving others. Firstly, all treatments have been guided by a Firesetting Treatment Strategy developed in consultation with stakeholders. Secondly, fire service personnel have contributed to all group programmes and the success of this suggests they additionally input into individual programmes. Thirdly, learning from other hospital treatment programmes has been imported such as very successful end of programme presentations to clinical teams. Fourthly, the Arson Treatment

Team has continually developed through innovation, networking, training, and presentation including the implementation of a quarterly newsletter and presentations to stakeholders such as at international conferences.

Whilst individual programmes were initially introduced to support later attendance at a group programme some participants who completed an individual programme progressed to lesser security without completing a group programme. The ATIP has therefore become an important treatment in its own right as supported by the positive evaluation data. The evaluation suggests a longer individual programme with more emphasis on problem solving and coping skills, maximising the use of visual materials, recruiting graduates of individual programmes to assist new patients in engaging with individual programmes and making work between sessions even simpler.

The benefits and drawbacks of group versus individual treatments

Group and individual treatments have been noted to have specific advantages and disadvantages. Whilst group interventions offer greater opportunities for learning with peers, in settings where risks towards self and others are exceptionally high the authors strongly advocate the provision of both group and individual treatment to enable women to access treatment and progress along their treatment pathways.

Limitations and key areas for future development

The evaluation is limited by the small number of participants who were involved and the lack of follow-up data to monitor recidivism. Future research could usefully incorporate follow-up of participants to track for possible re-offending. Understanding factors that predict recidivism in women firesetters is necessary so that these can be targeted through treatment. Also, offence paralleling behaviours in firesetters and the relationship between self-injury and firesetting behaviours require further investigation. The authors' clinical experiences suggest that some women engage in firesetting when attempts to elicit help through self-injury have not had the desired outcomes. Another important area for future development will be greater networking with Professor Theresa Gannon following her evaluation of the FIP-MO.

Conclusion

This study contributes to research on treating women firesetters, by developing and evaluating both group and individual treatment programmes specifically for women firesetters, and by incorporating a mixed CAT and CBT therapeutic approach and a module on trauma. This study evidenced high levels of engagement with group and individual arson treatment programmes, several post treatment psychometric gains, and very positive qualitative feedback and ratings. This study evidenced the importance of a whole system approach to treating women firesetters and the importance of all stakeholders including participants as powerful motivators for other participants and fire service personnel as important educators regarding fire related

matters. The study validated the importance of the ATIP for individuals who could not access group programmes.

Implications for Practice

In offering treatment programmes to women firesetters the authors suggest the following:

- Ensure organisational support and develop a Firesetting Treatment Strategy with stakeholders.
- Utilise standards for report writing, therapeutic work and supervision.
- Recruit a diverse team who embrace reflection and can commit to seeing a programme through.
- Ensure a safe, consistent, and confidential therapy space which fosters the building of therapeutic relationships.
- Incorporate a therapeutic model that facilitates the exploration of therapeutic processes including how participants' difficulties and specific treatment needs pertaining to firesetting manifest themselves within therapeutic relationships. CAT is recommended.
- Give participants information about the treatment programme and individual modules and advance notice of breaks, changes, and cancellations.
- Keep learning simple but varied to ensure patients' comprehension and incorporate session summaries within handouts.
- Invite your local fire service to input into treatment programmes.
- Celebrate successes (e.g. completion certificates and newsletter features).
- Incorporate patients and professionals' assessments of firesetting risks.
- Maximise service user involvement and experiential learning.
- Utilise pre and post measures targeting key areas for change.

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Table 1: Components of Arson Treatment Programmes

			Module name and number of sessions per module				
Programme	No. of patients completing	Years delivered	1.The Dangerousness of Firesetting	2: Coping and Social Skills	3: Trauma	4: Self-esteem and Self-Awareness	5: Relapse Prevention
Group 1 (ATGP1)	4	2007-2008	11	28	Not included	9	13
Group 2 (ATGP2)	5	2011-2012	13	20	10	10	13
Individual 1 (ATIP1)	2	2009-2010	7	6	6	6	7
Individual 2 (ATIP2)	4	2013-2015	7	6	6	6	7

Table 2: Arson Treatment Group Programmes: Number of completers, reasons for non-completion and attendance rates

Programme	Number of completers	Reasons for non-completion	Attendance rates of completers
ATGP1	4/6 (67%)	Early drop-out (1) Patient died (1)	95%
ATGP2	5/8 (63%)	Transferred to lesser security (2) Transferred to prison (1)	93%

Table 3: Arson Treatment Individual Programmes: Number of completers, reasons for non-completion and attendance rates

Programme	Number of completers	Reasons for non-completion	Attendance rates of completers
ATIP1	2/4 (50%)	Deterioration in mental health (2)	100%
ATIP2	4/5 (80%)	Deterioration in mental health (1)	99%

Table 4: Psychometric scores for ATGP1 participants

Scale and sub-scale	Pre-treatment			Post-treatment		
	N	Mean	SD	N	Mean	SD
Blame Attribution Inventory						
External Attribution	4	4.00	2.45	4	4.25	5.32
Mental Element Attribution	4	6.50	2.65	4	6.00	2.16
Guilt Feeling Attribution	4	11.25	3.30	4	10.50	6.14
Fire Interest Rating Scale	4	55.00	11.75	4	34.50	14.53
Functional Assessment of Fire: starting						
Self-Stimulation	4	1.25	1.03	4	1.25	1.33
Anxiety	4	1.50	1.73	4	3.00	0.82
Social Attention	4	3.50	1.00	4	2.75	1.89
Peer Favour	4	0.00	0.00	4	0.75	1.50
Auditory Hallucination	4	0.00	0.00	4	0.00	0.00
Depression	4	2.25	1.26	4	3.25	0.96
Anger	4	2.50	1.00	4	3.50	0.58
Demand, Escape and Avoidance	4	0.50	0.58	4	1.00	2.00
Functional Assessment of Fire: consequences						
Self-Stimulation	4	1.75	1.71	4	1.50	1.91
Anxiety	4	2.50	1.00	4	2.50	0.58
Social Attention	4	2.50	1.73	4	3.00	2.00
Peer Favour	4	0.00	0.00	4	0.25	0.50
Auditory Hallucination	4	0.00	0.00	4	0.00	0.00
Depression	4	1.75	1.71	4	1.25	0.96
Anger	4	2.50	1.91	4	2.25	1.29
Demand, Escape and Avoidance	4	0.75	0.96	4	1.00	2.00
Interpersonal Reactivity Index						
Perspective Taking	4	13.75	7.72	4	14.50	8.54
Empathic Concern	4	20.75	4.27	4	18.50	6.45
Fantasy	4	14.25	7.89	4	9.25	4.99
Personal Distress	4	21.50	4.80	4	18.25	4.99
Personal Reaction Inventory	4	55.25	9.18	4	56.25	7.37
Emotional Loneliness Scale	4	51.75	8.26	4	45.0	7.75

Table 5: Psychometric scores for ATGP2 participants

Scale and sub-scale	Pre-treatment			Post-treatment		
	N	Mean	SD	N	Mean	SD
Inventory of Altered Self-Capacities						
Interpersonal Conflicts	4	81.50	6.76	4	79.00	13.93
Idealisation Disillusionment	4	76.00	10.86	4	71.00	19.71
Abandonment Concerns	4	90.50	5.80	4	70.00	11.22
Identity Impairments	4	88.25	10.21	4	72.00	12.83
Identity Self-Awareness	4	87.75	6.40	4	72.50	12.71
Identity Impairment-Diffusion	4	86.25	16.07	4	69.50	15.84
Susceptibility to Influence	4	85.50	12.29	4	67.25	17.23
Affect Dysregulation	4	91.00	8.16	4	79.50	12.29
Affect Skills Deficits	4	85.00	6.93	4	72.25	12.92
Affect Instability	4	91.50	8.96	4	89.25	11.24
Tension Reduction Activities	4	79.00	17.80	4	66.00	11.69
The Social Problem Inventory Revised short version						
Positive Problem Orientation	4	89.00	9.80	4	93.50	10.47
Negative Problem Orientation	4	105.25	7.41	4	98.75	14.01
Rational Problem Solving	4	98.00	6.93	4	102.00	13.66
Impulsivity	4	105.00	17.22	4	100.50	12.69
Avoidance Style	4	104.00	9.38	4	101.25	12.61
Total	4	90.25	6.29	4	95.75	7.14
Coping Responses Inventory						
Logical Analysis	4	47.00	9.13	3	40.00	6.58
Positive Reappraisal	4	53.50	3.32	3	51.67	1.15
Seeking Guidance	4	53.00	7.61	3	46.00	11.53
Problem Solving	4	51.50	9.11	3	48.67	7.09
Cognitive Avoidance	4	52.00	6.06	3	52.67	8.08
Acceptance and Resignation	4	47.00	5.77	3	47.67	15.95
Seeking Alternative Rewards	4	56.00	9.38	3	60.33	10.97
Emotional Discharge	4	64.50	15.20	3	68.00	3.46
Emotional Problems Scale						
Thought/Behaviour Disorder	4	54.00	13.37	4	49.00	9.06
Impulse Control	4	59.50	15.20	4	42.50	4.73
Anxiety	4	59.75	13.57	4	48.75	6.02
Depression	4	58.00	12.52	4	49.75	6.80
Low Self-Esteem	4	60.00	12.96	4	58.50	8.54
Total Pathology	4	58.75	14.22	4	47.25	7.41
Rosenberg Self Esteem Scale						
Self-Competence	4	8.50	2.65	4	7.75	3.10
Self-Liking	4	4.75	1.89	4	7.25	4.19
Global Self-Esteem	4	13.25	3.77	4	15.00	7.16
Paulhaus Deception Scale GP2						
Impression Management	4	51.00	5.23	4	48.25	5.32
Self-Deceptive Enhancement	4	51.25	9.74	4	53.00	10.10

Table 6: Psychometric scores for ATIP1 and ATIP2 participants

Scale and sub-scale	Pre-treatment			Post-treatment		
	N	Mean	SD	N	Mean	SD
Inventory of Altered Self-Capacities						
Interpersonal Conflicts	6	89.00	11.06	6	84.00	14.23
Idealisation Disillusionment	6	79.00	15.67	6	79.17	14.58
Abandonment Concerns	6	90.67	9.33	6	87.33	18.27
Identity Impairments	6	88.50	10.46	6	82.17	14.91
Identity Self-Awareness	6	91.00	10.47	6	80.33	18.85
Identity Impairment-Diffusion	6	82.50	17.65	6	80.17	10.70
Susceptibility to Influence	6	89.00	14.99	6	80.50	18.78
Affect Dysregulation	6	96.83	5.67	6	86.17	13.64
Affect Skills Deficits	6	94.00	5.87	6	84.50	17.88
Affect Instability	6	95.67	7.81	6	85.17	14.05
Tension Reduction Activities	6	95.17	9.60	6	77.83	18.37
Social Problem Inventory Revised						
Positive Problem Orientation	5	77.80	27.75	5	92.00	18.44
Negative Problem Orientation	5	100.40	31.88	5	126.20	10.80
Rational Problem Solving	5	78.80	22.58	5	91.80	10.73
Impulsivity	5	102.60	33.98	5	117.80	9.73
Avoidance style	5	104.80	28.58	5	116.00	16.73
Total	5	77.20	9.73	5	79.60	7.47
Coping Responses Inventory						
Logical Analysis	3	40.00	1.73	3	49.33	11.01
Positive Reappraisal	3	50.33	3.05	3	54.67	6.66
Seeking Guidance	3	47.67	6.03	3	45.67	5.77
Problem Solving	3	48.67	1.15	3	52.33	7.50
Cognitive Avoidance	3	56.67	11.59	3	69.33	6.43
Acceptance and Resignation	3	58.00	8.54	3	55.67	3.79
Seeking Alternative Rewards	3	63.00	3.61	3	59.00	5.57
Emotional Discharge	3	72.67	8.74	3	73.67	7.09
Emotional Problems Scale						
Thought/Behaviour Disorder	5	58.20	11.86	5	52.20	9.96
Impulse Control	5	61.40	5.08	5	57.00	8.89
Anxiety	5	60.20	7.92	5	58.80	10.01
Depression	5	67.00	8.83	5	59.80	12.19
Low Self-Esteem	5	61.60	9.45	5	61.40	9.94
Total Pathology	6	65.00	9.72	6	60.00	10.72
Fire Interest Rating Scale (ATIP1 only)	2	28.00	1.41	2	44.50	21.92
Functional Assessment of Fire: starting						
Self-Stimulation	6	1.33	1.51	6	1.00	1.26
Anxiety	6	2.33	1.86	6	2.50	1.91
Social Attention	6	1.50	1.34	6	2.00	1.55
Peer Favour	6	0.67	1.63	6	0.00	0.00
Auditory Hallucination	6	1.00	1.10	6	1.00	1.26
Depression	6	3.50	0.84	6	3.00	1.26
Anger	6	2.83	0.98	6	2.33	1.36
Demand, Escape and Avoidance	6	1.17	1.33	6	1.17	0.98

Functional Assessment of Fire: Consequences						
Self-Stimulation	6	0.50	0.84	6	0.67	0.82
Anxiety	6	2.33	1.97	6	1.50	1.64
Social Attention	6	1.17	1.60	6	1.33	2.07
Peer Favour	6	0.67	1.63	6	0.67	1.63
Auditory Hallucination	6	0.67	1.21	6	0.50	0.84
Depression	6	1.40	1.67	6	0.83	1.33
Anger	6	1.17	1.33	6	0.67	1.03
Demand, Escape and Avoidance	6	1.33	1.21	6	1.00	1.10
Multidimensional Self-Esteem Inventory (ATIP1 only)						
Global Self-Esteem	2	47.50	7.78	2	50.00	8.48
Competence	2	43.00	0.00	2	57.50	2.12
Lovability	2	32.00	0.00	2	44.00	5.66
Likability	2	46.00	19.80	2	45.00	24.04
Self-Control	2	44.00	5.66	2	53.00	5.66
Personal Power	2	46.50	0.71	2	50.00	0.00
Moral Self-Approval	2	34.00	0.00	2	38.00	0.00
Body Appearance	2	48.00	7.07	2	46.00	9.90
Body Functioning	2	43.50	2.12	2	49.50	6.36
Identity Integration	2	44.00	1.41	2	44.50	0.71
Defensive Self-Enhancement	2	43.50	6.36	2	58.50	2.12
Rosenberg Self Esteem Scale (ATIP2 only)						
Self-Competence	4	6.00	2.58	4	8.50	1.73
Self-Liking	4	2.25	2.22	4	5.75	3.30
Global Self-Esteem	4	8.25	4.65	4	14.25	4.99
Paulhus Deception Scales						
Impression Management	6	55.50	8.09	5	59.00	10.27
Self-Deceptive Enhancement	6	50.67	7.92	5	54.60	9.07